

complete. Proposed construction activity within the study area must adhere to the ADEQ air quality rules and regulations, and to any local ordinances.

### 2.2.6 Hazardous Materials

Hazardous materials are regulated by the EPA pursuant to the Federal Resources Conservation and Recovery Act and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The EPA implements CERCLA, commonly known as Superfund, and its amendments, the 1986 Superfund Amendments and Reauthorization Act. The ADEQ website and Interactive GIS eMap were reviewed for Federal Superfund Sites, including National Priority List, Department of Defense, and Arizona Water Quality Assurance Revolving Fund (WQARF) sites. A one mile search radius was utilized to identify superfund sites within and around the Central Framework study area.

One superfund site was identified within the study area and is identified as the Pinal Creek WQARF registered site. The site is located in the Miami-Globe area of Gila County. The site has irregular boundaries, including the entire areas of the Phelps-Dodge Miami Mine and the BHP Copper properties (Copper Cities Mine, Miami Mine, Old Dominion Mine and Solitude Tailings). The southern boundary follows the Bloody Tanks Wash floodplain along US 60 through Miami to the community of Claypool, and then turns south to follow the Russell Gulch and Miami Wash floodplains toward the confluence with Pinal Creek. The site boundaries then parallel both sides of upper Pinal Creek to the city of Globe. North of the Miami Wash confluence with Pinal Creek, the site boundary includes the Pinal Creek floodplain plus a 1,000-foot-wide margin surrounding the floodplain north to Inspiration Dam. North of Inspiration Dam, the site's northern boundaries reduce to the floodplain of Pinal Creek and terminate at the Salt River.

Source control remedial actions are being implemented at all Phelps Dodge and BHP Copper mining facilities and are continually reviewed by ADEQ (Pinal Creek, 2007). ADEQ is currently reviewing the site-wide soils investigation and the BHP Copper remedial investigation of the Solitude Tailings Impoundment (Pinal Creek, 2007). Additionally, site-wide groundwater, surface water, and discharge monitoring are being conducted with approximately 80 to 100 wells and four surface water sites. Treated effluent from the Lower Pinal Creek Treatment Plant is being monitored monthly. Various source and exposure control actions are implemented at the site mine locations, including facility upgrades, groundwater extraction, groundwater containment, service removal of solution impoundments, capping/covering of tailings, management controls, institutional controls, and storm water controls (Pinal Creek, 2007). The BHP Copper Old Dominion Mine's waste rock and tailings were revegetated in 2004, the BHP Miami Unit No. 2 Tailings were capped and revegetated in 2006, and the Phelps Dodge-Miami slag pile along Bloody Tanks Wash was regraded, capped, and revegetated in 2006 (Pinal Creek, 2007).

At the site, approximately 105 million pounds of heavy metals (aluminum, beryllium, cadmium, cobalt, copper, iron, lead, manganese, nickel, and zinc) have been removed from the aquifers (Pinal Creek, 2007). The treated water was reused at the mines, evaporated at the mines, or released to Pinal Creek (Pinal Creek, 2007). Direct exposure to site contaminants could occur by consuming contaminated surface water or groundwater, or from ingesting or inhaling contaminated soil particles. Local water suppliers, such as the Arizona Water Company and the City of Globe, distribute water from a deeper regional aquifer that meets both the state and federal water quality standards (Pinal Creek, 2007). The Pinal Creek Group offers free well testing for residents who rely on private wells within the site; approximately 90 wells have been replaced to date (Pinal Creek, 2007).

An Initial Site Assessment (ISA) should be conducted during the design phase of any proposed developments within the study area. Further coordination will be required if right-of-way (R/W) acquisition or proposed construction actions will impact any existing hazardous material site. If new right-of-way is to be acquired for future projects, a Phase I Environmental Site Assessment should be conducted to satisfy the requirements of The All Appropriate Inquire Rule (CFR 40 312) and to allow the user a legal defense under the Landowner Liability Protections of CERCLA, as well as to provide the user with an account of the potential for the area to have been impacted by contaminants.



# Regional Framework Study: Central Arizona

**PRELIMINARY  
DRAFT**

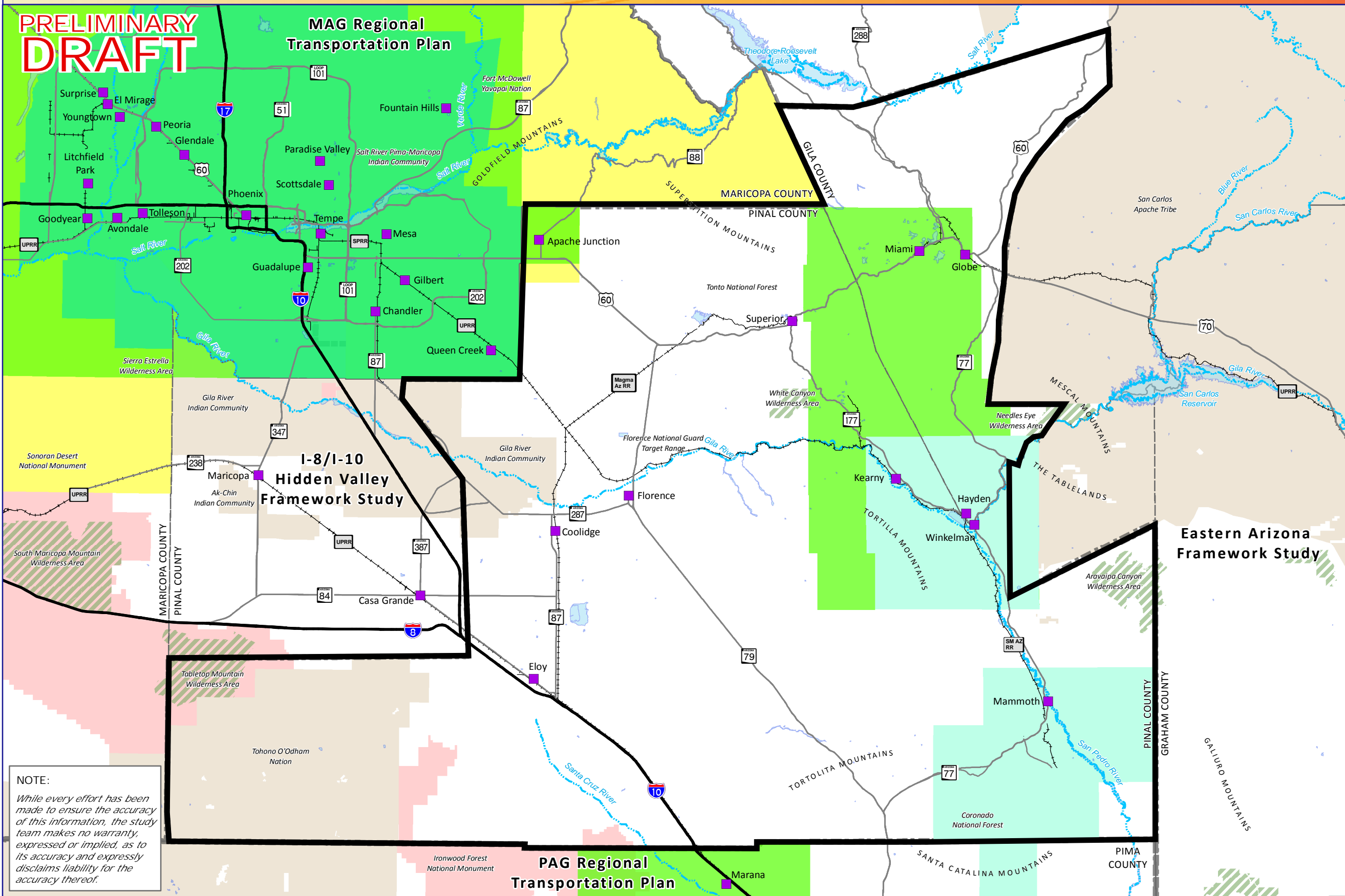


Figure 2-6  
Air Quality  
Non-Attainment  
Area Boundaries

- Legend**
- City/Town
  - Interstate
  - Highway
  - Railroad
  - River
  - Lake
  - County Boundary
  - Framework Study Boundary
  - Study Area Boundary
  - Wilderness Area
  - National Monument
  - Tribal Community
- Air Quality Pollutants**
- Ozone
  - Carbon Monoxide
  - PM10
  - Sulfur Dioxide

**NOTE:**  
While every effort has been made to ensure the accuracy of this information, the study team makes no warranty, expressed or implied, as to its accuracy and expressly disclaims liability for the accuracy thereof.

